# SIEMENS

| Data sheet | 6XV1840-2AN50 |
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| product description | Standard bus cable (4 wires), preferred length, not assembled |
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|  | IE FC TP Standard Cable GP 2x2 (PROFINET Type A), CAT5E, bus cable 4-wire, shielded, special configuration for quick assembly to IE FC RJ45 plug 2x2, 50 m. |

| suitability for use | Standard cable with rigid cores for fast installation |
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| cable designation | 2YY (ST) CY 2x2x0,64/1,5-100 GN SF/UTP |
| wire length | 50 m |
| **electrical data** | |
| attenuation factor per length | |
| ● at 10 MHz / maximum | 0.052 dB/m |
| ● at 100 MHz / maximum | 0.195 dB/m |
| impedance | |
| ● at 1 MHz ... 100 MHz | 100 Ω |
| relative symmetrical tolerance | |
| ● of the characteristic impedance at 1 MHz … 100 MHz | 15 % |
| near-end crosstalk per length | |
| ● at 1 MHz ... 100 MHz | 0.5 dB/m |
| transfer impedance per length / at 10 MHz | 10 mΩ/m |
| loop resistance per length / maximum | 115 mΩ/m |
| operating voltage | |
| ● RMS value | 80 V |
| NVP value in percent | 69 % |
| **mechanical data** | |
| number of electrical cores | 4 |
| design of the shield | Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires |
| type of electrical connection / FastConnect | Yes |
| core diameter | |
| ● of AWG22 insulated conductor | 0.64 mm |
| outer diameter | |
| ● of inner conductor | 0.64 mm |
| ● of the wire insulation | 1.5 mm |
| ● of the inner sheath of the cable | 3.9 mm |
| ● of cable sheath | 6.5 mm |
| symmetrical tolerance of the outer diameter / of cable sheath | 0.2 mm |
| material | |
| ● of the wire insulation | polyethylene (PE) |
| ● of the inner sheath of the cable | PVC |
| ● of cable sheath | PVC |
| color | |
| ● of the insulation of data wires | white/yellow/blue/orange |
| ● of cable sheath | green |
| bending radius | |

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| | |
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| ● with single bend / minimum permissible | 19.5 mm |
| ● with multiple bends / minimum permissible | 49 mm |
| tensile load / maximum | 150 N |
| weight per length | 61 kg/km |
| **ambient conditions** | |
| ambient temperature | |
| ● during operation | -40 ... +75 °C |
| ● during storage | -40 ... +75 °C |
| ● during transport | -40 ... +75 °C |
| ● during installation | -40 ... +60 °C |
| ● note | Electrical properties measured at 20 °C, tests according to DIN VDE 0472 |
| fire behavior | flame resistant according to IEC 60332-3-24 (Category C) and UL 1685 (CSA FT 4) |
| class of burning behaviour / according to EN 13501-6 | Eca |
| chemical resistance | |
| ● to mineral oil | oil resistant according to IEC 60811-2-1 (4 h / 70°C) |
| ● to grease | Conditional resistance |
| ● to water | conditional resistance |
| radiological resistance / to UV radiation | resistant |
| **product features, product functions, product components / general** | |
| product feature | |
| ● halogen-free | No |
| ● silicon-free | Yes |
| wire length / for Industrial Ethernet | |
| ● with 100BaseTX | 100 m |
| **standards, specifications, approvals** | |
| UL/ETL listing / 300 V Rating | Yes; c(ETL)us / CMG / (ETL)us PLTC/ ITC / Sun Res |
| UL/ETL style / 600 V Rating | Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2 |
| certificate of suitability | |
| ● EAC approval | Yes |
| ● CE marking | Yes |
| ● RoHS conformity | Yes |
| standard for structured cabling | Cat5e |
| Marine classification association | |
| ● American Bureau of Shipping Europe Ltd. (ABS) | No |
| ● French marine classification society (BV) | No |
| ● Det Norske Veritas (DNV) | No |
| ● Germanische Lloyd (GL) | No |
| ● Lloyds Register of Shipping (LRS) | No |
| ● Nippon Kaiji Kyokai (NK) | No |
| ● Polski Rejestr Statkow (PRS) | No |
| reference code | |
| ● according to IEC 81346-2 | WG |
| ● according to IEC 81346-2:2019 | WGB |
| **standards, specifications, approvals / Environmental Product Declaration** | |
| Environmental Product Declaration | Yes |
| global warming potential [CO2 eq] | |
| ● total | 0.9 kg |
| ● during manufacturing | 0.81 kg |
| ● during operation | 0.02 kg |
| ● after end of life | 0.07 kg |
| **further information / internet links** | |
| internet link | |
| ● to website: Selection guide for cables and connectors | https://support.industry.siemens.com/cs/ww/en/view/109766358 |
| ● to web page: selection aid TIA Selection Tool | https://www.siemens.com/tstcloud |
| ● to web page: SiePortal | https://sieportal.siemens.com/ |
| ● to website: Image database | https://www.automation.siemens.com/bilddb |
| ● to website: CAx-Download-Manager | https://www.siemens.com/cax |
| ● to website: Industry Online Support | https://support.industry.siemens.com |
| **security information** | |
| security information | Siemens provides products and solutions with industrial cybersecurity functions |

that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

## Approvals / Certificates

### General Product Approval

| | | | | Environment |
|---|---|---|---|---|
| Manufacturer Declaration | CE EG-Konf. | UKCA | CCC | Declaration of Conformity |

### Industrial Communication

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